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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,835	01/16/2004	Chun-Chen Chen	DEE-PT147	8293
3624	7590	12/14/2005	EXAMINER	
VOLPE AND KOENIG, P.C. UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			CHUNG TRANS, XUONG MY	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/759,835	<b>Applicant(s)</b> CHEN, CHUN-CHEN	
	<b>Examiner</b> Xuong M. Chung-Trans	<b>Art Unit</b> 2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16 and 21 is/are rejected.
- 7) ☒ Claim(s) 15 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. This is responsive to the amendment filed on October 3, 2005. Claims 1 and 15 have been amended, claims 17-19 have been previously canceled, and new claims 20-21 have been added. Therefore, claims 1-16 and 20-21 are pending in this application.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art (specification, pages 1-2 and figs. 1-4) and in view of Rigazio (USPN 3,260,905), and Harris Jr. (3,210,720).

As per claims 1-3 and 21, the admitted prior art discloses the invention substantially as claimed except for a second ring mounted on said central pillar and having a third surface and a fourth surface, wherein said second surface and said third surface are adjacent to each other and have a distance therebetween; and a conducting piece directly and electrically connected with said second ring, the central pillar through the opening, and the second end, after assembly, of the terminal to form thereby three contact areas thereamong. Rigazio, however, teaches such a terminal (18, 21) comprising a first ring (24) and the second ring (23) and the use of a conducting piece (20) directly and electrically connected with the second ring (23), the central pillar (22) through the opening, and the second end (27), after assembly, of the terminal to form thereby three contact areas thereamong (fig. 2, and col. 2, lines 44-61). Therefore, it would have

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been obvious to one of ordinary skill in the art at the time the invention was made to include the teaching of Rigazio in the admitted prior art in order to provide an excellent electrical connection thereamong. Further, Harris teaches in figs. 4-5 the terminal (48) formed with a plurality of spaced ring (50) for the purpose of anchorage of the insulation molded thereon. Therefore, it would have been obvious to one skilled artisan at the time the invention was made to include the teaching of Harris in the admitted prior art in order to prevent separation of the terminal and the insulator body. And further, Harris specifically teaches a process of tying with a selected amount of an external force so that the socket connector can be better fitted (col. 5, lines 14-21).

As per claims 5-7, the admitted prior art discloses the invention substantially as claimed but does not teach said first and said second rings (50) have an identical diameter and said distance between said second surface and said third surface is larger than zero, wherein a space between said first ring and said second ring of said terminal is tightly filled by said main body, and said first and said second rings are surrounded by said main body. Harris, however, discloses said first and said second rings (50) have an identical diameter and said distance between said second surface and said third surface is larger than zero, wherein a space between said first ring and said second ring of said terminal is tightly filled by said main body, and said first and said second rings are surrounded by said main body. Therefore, it would have been obvious to one skilled artisan at the time the invention was made to include the teaching of Harris in the admitted prior art in order to prevent separation of the terminal and the insulator body.

As per claims 8-13, The admitted prior art discloses the invention substantially as claimed but does not teach the distance between said second surface and said third surface is

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equal to zero; wherein said second ring has a relatively smaller diameter than that of said first ring, wherein said main body and said terminal are combined together through assembling, wherein said central pillar, said first ring and said second ring of said terminal are integrally formed; wherein said terminal and said conducting piece are made of a conductive material.

Rigazio, however, discloses the distance between said

second surface and said third surface is equal to zero; wherein said second ring has a relatively smaller diameter than that of said first ring, wherein said main body and said terminal are combined together through assembling, wherein said central pillar, said first ring and said second ring of said terminal are integrally formed; wherein said terminal and said conducting piece are made of a conductive material. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teaching of Rigazio in the admitted prior art in order to provide a plurality of ring with different diameter for the purpose of anchorage of the insulation body.

As per claims 14 and 16, the admitted prior art discloses the invention substantially as claimed but does not teach said conducting piece is directly and tightly pressed close to said ring by riveting the second end (27) of said terminal. Rigazio, however, discloses said conducting piece is directly and tightly pressed close to said ring by riveting the second end (27) of said terminal (fig. 2, and col. 2, lines 44-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teaching of Rigazio in the admitted prior art in order to provide an excellent electrical connection between the conducting piece and the ring.

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4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art, Rigazio and Harris as applied to claim 1 above, and further in view of Schank (2,097,257).

The admitted prior art discloses the invention substantially as claimed but does not teach the main body is molded by injection. Schank, however, teaches the body 10 is molded (col. 2, lines 7-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the teach of Schank in the admitted prior art so that the insulator body can be injection molded as an integral unit and thereby providing easy assembly.

5. Claims 15 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record taken in combination do not teach or suggest that the second end of the terminal is assembled/riveted by a purposely selected amount of the external force so that the conducting piece is directly and fixedly rejected against the second ring and the purposely selected amount of the external force is selected based at least in part on forming the contact area, which is a contact plane, between the assembled/riveted second end of the terminal and the conducting piece as recited in claims 15 and 20.

6. Applicant's arguments with respect to claims 1-14, 16 and 21 have been considered but they are not persuasive.

Applicant stated that the admitted prior art, Rigazio and Harris taken in combination failed to disclose a socket including at least a conducting piece directly and electrically

connected with the second ring, the central pillar through the opening, and the second end, after assembled, of the terminal to form thereby three contact areas thereamong tightly by a purposely selected amount of an external force. Applicant's attention is directed to column 5, lines 14-21 of Harris where Harris specifically teaches a process of tying with a selected amount of an external force so that the socket connector can be better fitted and more permanent seal.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xuong M. Chung-Trans whose telephone number is (571) 272-2002. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 extension 33.. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Xuong Chung-Trans  
Patent Examiner  
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